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(71) Applicant (for all designated States except US): BIO-RAD MICROMEASUREMENTS LIMITED [GB/GB]; Bio-Rad House, Maylands Avenue, Hemel Hempstead, Hertfordshire HP2 7TD (GB).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): MAYES, Ian, Christopher [GB/GB]; Bio-Rad House, Maylands Avenue, Hemel Hempstead, Hertfordshire HP2 7TD (GB). HIGGS, Victor [GB/GB]; Bio-Rad House, Maylands Avenue, Hemel Hempstead, Hertfordshire HP2 7TD (GB).
- (74) Agent: WILLIAM JONES (YORK); The Crescent, 54 Blossom Street, York YO2 2AP (GB).

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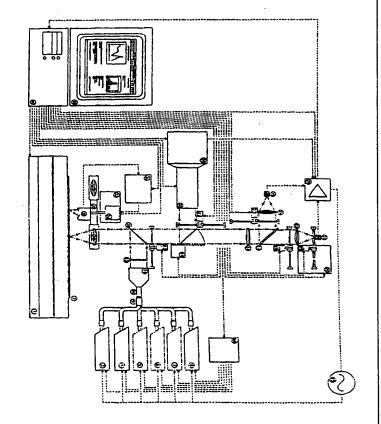
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(54) Title: APPARATUS AND METHOD FOR DETECTING MICRO DEFECTS IN SEMI-CONDUCTORS

(57) Abstract

The invention relates to a method and apparatus for detecting defects in a semiconductor or silicon structure at room temperature, and in an efficient time, using photoluminescence. The invention employs the use of a high intensity beam of light preferably having a spot size between 0,1 mm-0,5 microns and a peak or average power density of 10^4 - 10^9 w/cm² with a view to generating a high concentration of charge carriers, which charge characters detect defects in a semiconductor by interacting with same. These defects are visible by producing a photoluminescence image of the semiconductor. Several wavelenghts may be selected to identify defects at a selective depth as well as confocal optics may be used.



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